## Claims

LEGAL INSTRUMENTS EXAMINER: PLEASE NOTE THAT THIS RESPONSE CONTAINS A VALID S-SIGNATURE UNDER 37 CFR 1.4.

Claims 1-26 (Cancelled)

27. (Currently Amended) A system for use with a broadband network, the system comprising:
a network-metrics apparatus configured to obtain performance metrics for at least a portion of the broadband network; and
a data-processing apparatus coupled to the network-metrics apparatus and configured to combine performance metrics obtained by the network-metrics apparatus for lower topological levels of the network into a metric of network performance for a higher topological level of the network, the higher topological level comprising the lower topological levels-; and
the data-processing apparatus configured to weight contributors to performance metrics for lower topological levels of the network into the metric of network performance for the higher topological level of the network, the contributors weighted according to their effect on the performance metrics.

28. (Previously Presented) The system of claim 27, further comprising:
the network-metrics apparatus configured to obtain cable-modem hour metrics for at least a portion of the broadband network; and
the data-processing apparatus configured to combine cable-modem hour metrics for lower topological levels of the network into a cable-modem hour metric for the higher topological level of the network.

29. (Previously Presented) The system of claim 27, further comprising:
a data-processing apparatus configured to combine, separately, (1) performance metrics obtained by the network-metrics apparatus for lower topological levels and related to network capacity and/or traffic into a metric of network capacity and/or traffic for a higher topological level of the

network, and (2) performance metrics obtained by the network-metrics apparatus for lower topological levels and related to network connectivity into a metric of network connectivity for a higher topological level of the network.

30. (Cancelled)

31. (Previously Presented) The system of claim 27, further comprising:
a data-processing apparatus coupled to the network-metrics apparatus and configured to weight the performance metrics for lower topological levels when combining the performance metrics for lower topological levels into the performance metric for the higher topological level, the performance metrics for lower topological levels weighted according to at least one of (1) perceived impact on network performance, and (2) perceived priority among performance metrics.

32. (Previously Presented) The system of claim 27, further comprising:
a data-processing apparatus coupled to the network-metrics apparatus and configured to normalize raw data related to network performance to obtain the performance metrics for lower topological levels of the network.

33. (Previously Presented) The system of claim 27, further comprising:
the data-processing apparatus configured to combine cable modem hours for lower topological levels of the network into a level of non-degraded or degraded performance for the higher topological level of the network.

34. (Currently Amended) A system for use with a broadband network, the system comprising:
a collector configured to collect raw data, indicative of network operation, from the network;
first-metric determining means, coupled to the collector, for receiving the raw data from the collector, manipulating the raw data to periodically determine performance metrics for lower topological layers of the network, the performance metrics for lower topological layers assigned one of a plurality of pre-determined performance levels, and being associated with a time period; and

combining means, coupled to the determining means, for combining the performance metrics for
lower topological layers into performance metrics for a higher topological network layer
comprising the lower topological layers, the performance metrics for the higher topological layer
also associated with the time period, and indicative of the higher topological layer being at one of
the pre-determined performance levels during the time period-; and
the combining means for weighing contributors to performance metrics for lower topological levels
of the network into the metric of network performance for the higher topological level of the
network, the contributors weighted according to their effect on the performance metrics.

35. (Previously Presented) The system of claim 34, further comprising:
the first-metric determining means for manipulating the raw data to periodically determine cable
modem hours for lower topological layers of the network, the cable modem hours for lower
topological layers each assigned a level of degradation over the time period; and
the combining means for combining the cable modem hours for lower topological layers into cable
modem hours for the higher topological network layer, the cable modem hours for the higher
topological layer assigned a level of degradation that results from combining the levels of
degradation for the lower topological layers over the time period.

36. (Previously Presented) The system of claim 34, further comprising:
the first-metric determining means for determining if the raw data is a root cause or a factor in the
root cause of performance degradation for lower topological layers of the network, and to weight
the raw data accordingly when forming the performance metrics for lower topological layers of the
network.

37. (Previously Presented) The system of claim 36, further comprising:
the first-metric determining means for promoting the raw data from a factor to a root cause when
the raw data is found to have a direct correlation on network performance, and/or for demoting the
raw data to a factor from a root cause when the raw data is not found to have a direct correlation on
network performance.

38. (Previously Presented) The system of claim 34, further comprising:

the first-metric determining means and the combining means disposed in a node connected to at least a portion of the network.

39. (Currently Amended) A computer program product for consolidating broadband network performance and comprising computer-executable instructions for causing a computer to:
periodically collect a cable modem hour metric for lower-level elements of a broadband network;
use the cable modem hour metric to determine amounts of time that the lower-level network elements are degraded for a plurality of performance issues;
for each issue, combine the amounts of time that the lower-level network elements are degraded to determine cumulative amounts of time of degraded lower-level network element performance;
combine the cumulative amounts of time of degraded lower-level network element performance into cumulative amounts of time of degraded lower-level network performance for groups of related issues; and
combine the cumulative amounts of time of degraded lower-level network performance for groups of related issues into cumulative amounts of time of degraded network performance for higher-level network elements, the higher-level network elements comprising the lower-level network elements-; and
weighting contributors to performance metrics for lower level network elements into metrics of network performance for higher level network elements, the contributors weighted according to their effect on the performance metrics.

40. (Currently Amended) A method of providing quality of service to a broadband network, comprising:
collecting raw data, indicative of network operation, from the network;
receiving the collected raw data;
manipulating the raw data to periodically determine performance metrics for lower topological layers of the network, the performance metrics for lower topological layers assigned one or a plurality of pre-determined performance levels, and being associated with a time period;
combining the performance metrics for lower topological layers into performance metrics for a higher topological network layer comprising the lower topological layers, the performance metrics

for the higher topological layer also associated with the time period, and indicative of the higher topological layer being at one of the pre-determined performance levels during the time period; and

weighing contributors to performance metrics for the lower topological levels of the network into the metric of network performance for the higher topological level of the network, the contributors weighted according to their effect on the performance metrics.